

CLAIMS

1. A reclosable bag comprising:

a receptacle comprising first and second walls joined at their sides, said first and second walls comprising respective upper marginal portions that form a mouth at a top of said receptacle and respective lower portions at a bottom of said receptacle;

5 a first string zipper comprising a first pair of mutually interlockable zipper parts respectively joined to said upper marginal portions of said first and second walls;

10 a second string zipper comprising a second pair of mutually interlockable zipper parts respectively joined to said lower portions of said first and second walls;

a slider mounted on said first string zipper for opening and closing said first string zipper; and

a flap extending downward from said bottom of said receptacle.

15 2. The bag as recited in claim 1, wherein said flap is integrally formed with said first wall.

3. The bag as recited in claim 1, wherein said flap comprises first and second holes.

20 4. The bag as recited in claim 1, wherein said flap comprises first and second slits.

5. The bag as recited in claim 1, wherein said flap comprises a line of weakened tear resistance.

6. The bag as recited in claim 5, wherein said line of weakened tear resistance comprises a series of spaced perforations.

7. The bag as recited in claim 5, wherein said line of weakened tear resistance comprises a scoreline.

8. The bag as recited in claim 5, wherein said line of weakened tear resistance extends across substantially the entire length of said flap.

5 9. The bag as recited in claim 1, wherein said slider comprises first and second side walls spaced apart to define a passageway therebetween, and a plow that partitions said passageway into first and second spaces respectively occupied by portions of said respective zipper parts of said first string zipper, said upper marginal portions of said first and second walls 10 passing through said first and second spaces respectively.

15 10. The bag as recited in claim 9, wherein said slider further comprises a first retaining ledge projecting from said first side wall into said passageway, and a second retaining ledge projecting from said second side wall into said passageway, said first retaining ledge being latched under a portion of one of said zipper parts of said first string zipper, and said second retaining ledge being latched under a portion of the other zipper part of said first string zipper.

20 11. The bag as recited in claim 1, wherein one of said zipper parts of said first string zipper comprises first and second male profiles, and the other zipper part of said first string zipper comprises first and second female profiles that respectively receive said male profiles when said first string zipper is closed.

25 12. The bag as recited in claim 11, wherein one of said zipper parts of said second string zipper comprises third and fourth male profiles, and the other zipper part of said second string zipper comprises third and fourth female profiles in which said third and fourth male profiles are respectively received.

13. A method of manufacturing a reclosable bag, comprising the following steps:

5 (a) folding a web of bag making film so that a first portion of said web on one side of said fold has an extension portion that extends beyond an edge of a second portion of said folded web;

(b) joining the backs of first and second flangeless zipper strips to one of said first and second web portions before or after said folding step;

10 (c) joining the backs of third and fourth flangeless zipper strips to the other of said first and second web portions before or after said folding step, said first and third zipper strips being mutually confronting to form a first string zipper, and said second and fourth zipper strips being mutually confronting to form a second string zipper that is further away from the folded edge of said web than said first string zipper is;

15 (d) cutting respective portions of said first and second web portions adjacent said first string zipper to remove the folded edge of said web; and

(e) inserting a slider on said first string zipper.

20 14. The method as recited in claim 13, further comprising the step of forming first and second holes in said extension portion of said web before or after said folding step.

15. The method as recited in claim 13, further comprising the step of forming first and second slits in said extension portion of said web before or after said folding step.

25 16. The method as recited in claim 13, wherein step (a) is performed after step (b) and before step (c), further comprising the step of interlocking said third and fourth flangeless zipper strips with said first and second flangeless zipper strips respectively prior to step (b).

17. The method as recited in claim 13, wherein steps (b) and (c) are performed after step (a), further comprising the step of interlocking said third and fourth flangeless zipper strips with said first and second flangeless zipper strips respectively prior to steps (b) and (c).

5 18. The method as recited in claim 13, wherein steps (b) and (c) are performed before step (a), further comprising the step of interlocking said third and fourth flangeless zipper strips with said first and second flangeless zipper strips respectively after step (a).

10 19. The method as recited in claim 13, further comprising the step of interlocking said first and third flangeless zipper strips prior to step (e), wherein step (e) comprises the steps of opening a section of said interlocked first and third flangeless zipper strips and pushing said slider onto said opened section.

15 20. The method as recited in claim 13, further comprising the step of perforating said extension portion of said web before or after said folding step.

21. The method as recited in claim 13, further comprising the step of scoring said extension portion of said web before or after said folding step.

20 22. A method of manufacturing a reclosable bag, comprising the following steps:

(a) folding a web of bag making film so that a first portion of said web on one side of said fold has an extension portion that extends beyond an edge of a second portion of said folded web;

25 (b) joining the back of a first flangeless zipper strip to said second web portion in a zone proximal to where said fold will or has been formed;

(c) joining the back of a second flangeless zipper strip to said first web portion in a zone that will confront the first flangeless zipper strip when the

web is in the folded state;

(d) joining the back of a third flangeless zipper strip to said second web portion in a zone proximal to said edge of said second web portion;

5 (e) joining the back of a fourth flangeless zipper strip to said first web portion in a zone that will confront said third flangeless zipper strip when said web is in said folded state;

(f) cutting respective portions of said first and second web portions adjacent said first and second flangeless zipper strips to remove the folded edge of said web; and

10 (g) inserting a slider on said first and second flangeless zipper strips.

23. The method as recited in claim 22, further comprising the step of forming first and second holes in said extension portion of said web before or after said folding step.

15 24. The method as recited in claim 22, further comprising the step of forming first and second slits in said extension portion of said web before or after said folding step.

20 25. The method as recited in claim 22, further comprising the step of interlocking said first and second flangeless zipper strips prior to step (g), wherein step (g) comprises the steps of opening a section of said interlocked first and second flangeless zipper strips and pushing said slider onto said opened section.

25 26. The method as recited in claim 22, further comprising the step of forming a line of weakened tear resistance across said extension portion of said web before or after said folding step.

27. A reclosable bag comprising:

a receptacle having a top and a bottom;

a first string zipper attached to said top of said receptacle for providing access to an interior volume of said receptacle;

5 a second string zipper attached to said bottom of said receptacle;

a slider mounted on said first string zipper for opening and closing said first string zipper; and

10 a flap extending downward from said bottom of said receptacle, said flap comprising a discontinuity and a line of weakened tear resistance that traverses an area disposed between said second string zipper and said discontinuity.

28. The bag as recited in claim 27, wherein said flap further comprises a second discontinuity spaced apart from said discontinuity on the same side of said line of weakened tear resistance.

15 29. The bag as recited in claim 27, wherein said receptacle comprises first and second walls, and said flap is integrally formed with said first wall.

30. The bag as recited in claim 27, wherein said discontinuity comprises a hole.

20 31. The bag as recited in claim 27, wherein said discontinuity comprises a slit.

32. The bag as recited in claim 27, wherein said line of weakened tear resistance comprises a series of spaced perforations.

25 33. The bag as recited in claim 27, wherein said line of weakened tear resistance comprises a scoreline.

34. A method of manufacturing a reclosable bag, comprising the following steps:

(a) arranging film material to form opposing walls and a flap connected to one of said walls;

5 (b) joining a first portion of said film material to a back of a first flangeless zipper strip before or after said arranging step;

(c) joining a second portion of said film material to a back of a second flangeless zipper strip before or after said arranging step;

10 (d) joining a third portion of said film material to a back of a third flangeless zipper strip before or after said arranging step;

(e) joining a fourth portion of said film material to a back of a fourth flangeless zipper strip before or after said arranging step;

(f) aligning said first and second flangeless zipper strips with each other;

15 (g) aligning said third and fourth flangeless zipper strips with each other;

20 (h) after steps (b), (c) and (f) have been performed, mounting a slider onto said aligned first and second flangeless zipper strips, with said first portion of said film material being disposed between a first side wall of said slider and a back of said first flangeless zipper strip, and said second portion of said film material being disposed between a second side wall of said slider and a back of said second flangeless zipper strip; and

25 (i) joining fifth and sixth portions of said film material to each other and joining seventh and eighth portions of said film material to each other for forming a receptacle in concert with said first and second opposing walls and said first and second string zippers, said flap being connected to said

receptacle.

35. The method as recited in claim 34, wherein step (a) comprises folding a web of film material along a fold line to form a U- or V-shaped profile comprising first and second legs, said first leg comprising one of
5 said opposing walls, and said second leg comprising the other of said opposing walls.

36. The method as recited in claim 35, wherein said second leg further comprises said flap.

10 37. The method as recited in claim 35, wherein said second leg is longer than said first leg.

38. The method as recited in claim 34, wherein said aligned first and second zipper strips are generally parallel to said aligned third and fourth zipper strips.

15 39. The method as recited in claim 35, further comprising the step of trimming respective portions of said first and second legs connected by said fold line.

40. The method as recited in claim 34, further comprising the step of forming at least one discontinuity in said flap.

20 41. The method as recited in claim 34, further comprising the step of forming a line of weakened tear resistance in said flap.